

**What is claimed is:**

- 1                    1. A method for doing call classification on a call to a  
2    destination endpoint, comprising the steps of:  
3                    receiving audio information from the destination  
4    endpoint;  
5                    concurrently analyzing using automatic speech  
6    recognition the received audio information for a first type of  
7    classification and a second type of classification; and  
8                    determining a call classification for the destination  
9    endpoint in response to the step of analyzing.
- 1                    2. The method of claim 1 wherein the first type of  
2    classification is for words.
- 1                    3. The method of claim 2 wherein the analyzed words  
2    are formed as phrases.
- 1                    4. The method of claim 2 wherein the second type of  
2    classification is for tones.
- 1                    5. The method of claim 4 wherein the step of  
2    analyzing comprises the step of executing a Hidden Markov  
3    Model to determine the presence of words or tones in the audio  
4    information.
- 1                    6. The method of claim 5 wherein the step of

2     executing comprises the step of using a grammar for speech  
3     and tones.

1             7. The method of claim 6 wherein the step of  
2     determining comprises the step of executing an inference  
3     engine.

1             8. A method for doing call classification on a call to a  
2     destination endpoint, comprising the steps of:  
3             receiving audio information from the destination  
4     endpoint;  
5             concurrently analyzing using automatic speech  
6     recognition the received audio information for words and tones;  
7     and  
8             determining a call classification for the destination  
9     endpoint in response to the analysis for words and tones.

1             9. The method of claim 8 wherein the step of  
2     analyzing for speech comprises the step of executing a Hidden  
3     Markov Model to determine the presence of words or tones in  
4     the audio information.

1             10. The method of claim 9 wherein the step of  
2     executing comprises the step of using a grammar for speech  
3     and tones.

1             11. The method of claim 10 wherein the step of

2 determining comprises the step of executing an inference  
3 engine.

1 12. A method for doing call classification by an  
2 automatic speech recognition unit on a call to a destination  
3 endpoint, comprising the steps of:

4 receiving audio information from the destination  
5 endpoint by the automatic speech recognition unit;

6 concurrently analyzing using automatic speech  
7 recognition the received audio information for a first type of  
8 classification and a second type of classification by the  
9 automatic speech recognition unit; and

10 determining a call classification for the destination  
11 endpoint in response to the step of analyzing by the automatic  
12 speech recognition unit.

1 13. The method of claim 12 wherein the first type of  
2 classification is for words.

1 14. The method of claim 13 wherein the analyzed  
2 words are formed as phrases.

1 15. The method of claim 13 wherein the second type  
2 of classification is for tones.

1 16. The method of claim 15 wherein the step of  
2 analyzing comprises the step of executing a Hidden Markov

3 Model to determine the presence of words or tones in the audio  
4 information.

1 17. The method of claim 16 wherein the step of  
2 executing comprises the step of using a grammar for speech  
3 and tones.

1 18. The method of claim 17 wherein the step of  
2 determining comprises the step of executing an inference  
3 engine.

1 19. A call classifier for determining the call  
2 classification of a called destination endpoint, comprising:  
3 an automatic speech recognizer for detecting first and  
4 second characteristics in audio information received from the  
5 called destination endpoint; and  
6 inference engine for classifying the call in response to  
7 the automatic speech recognizer.

1 20. The call classifier of claim 19 wherein the first  
2 characteristics are words.

1 21. The call classifier of claim 20 wherein the words  
2 are formed into phrases.

1 22. The call classifier of claim 20 wherein the second  
2 characteristics are tones.

1                    23. The call classifier of claim 22 wherein the  
2    automatic speech recognizer is executing a Hidden Markov  
3    Model.